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10/8/2008: Current State of
Gasoline Prices

Gas Prices

1. The Global Demand Supply Equation
2. What goes into the price of Gasoline
3. Common Questions Asked

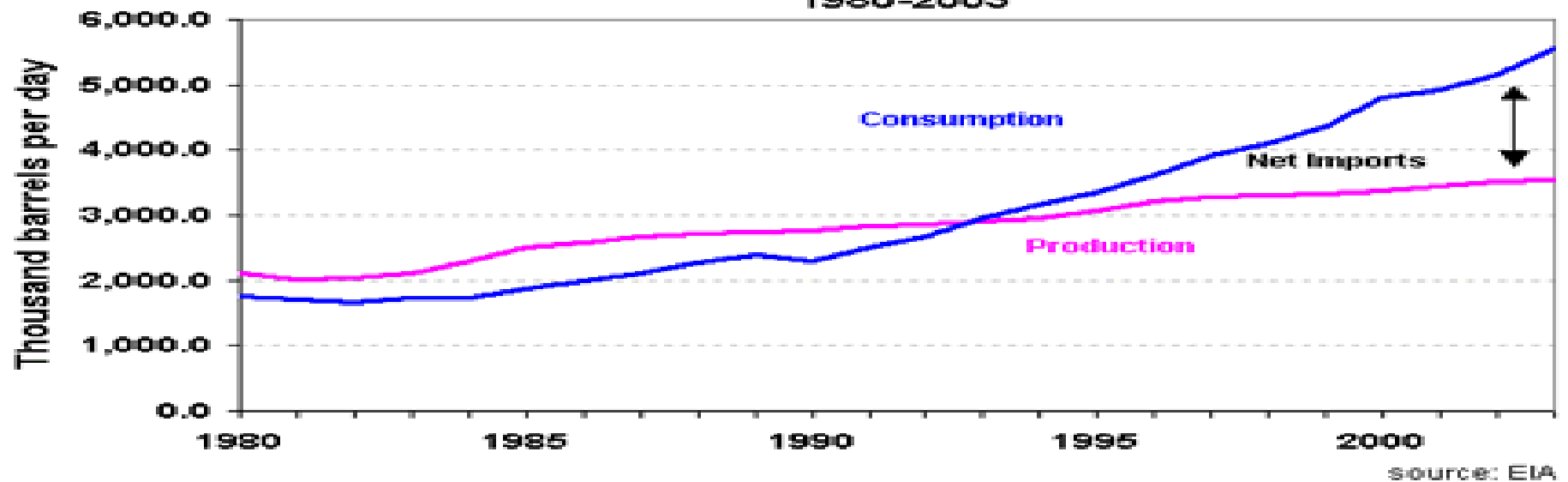
Petroleum as a Commodity

- This is not an Indiana Specific Issue
- This is not a US Specific Issue
- This is a World Issue

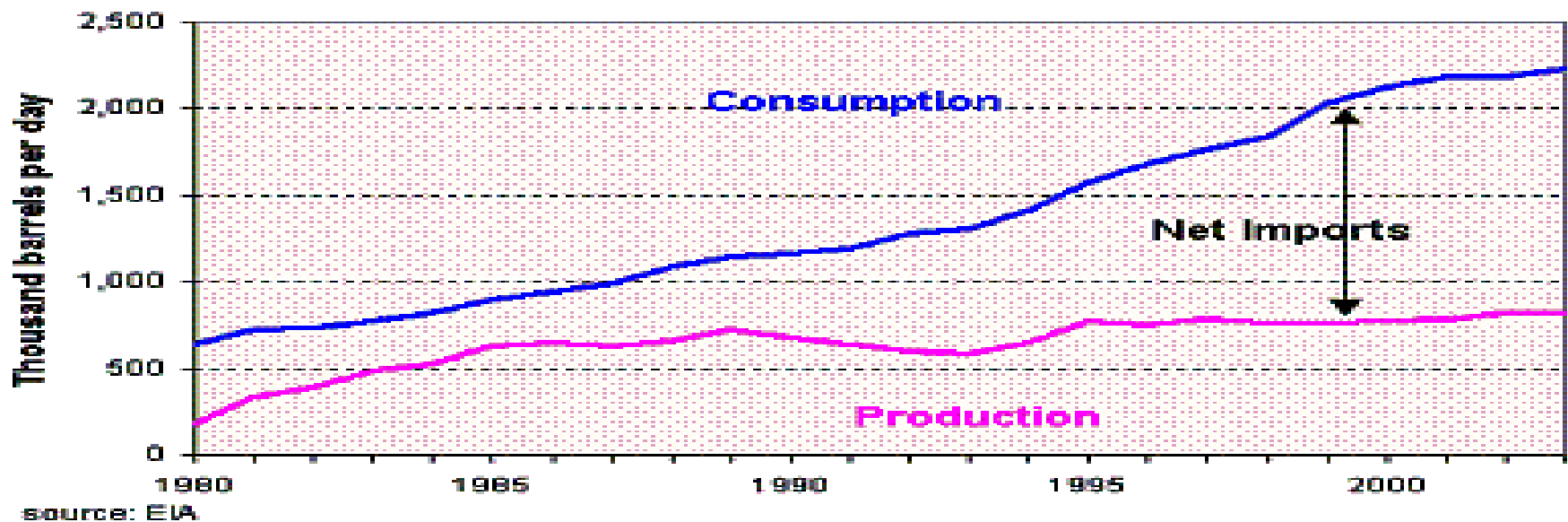
Major Flows of Crude Oil



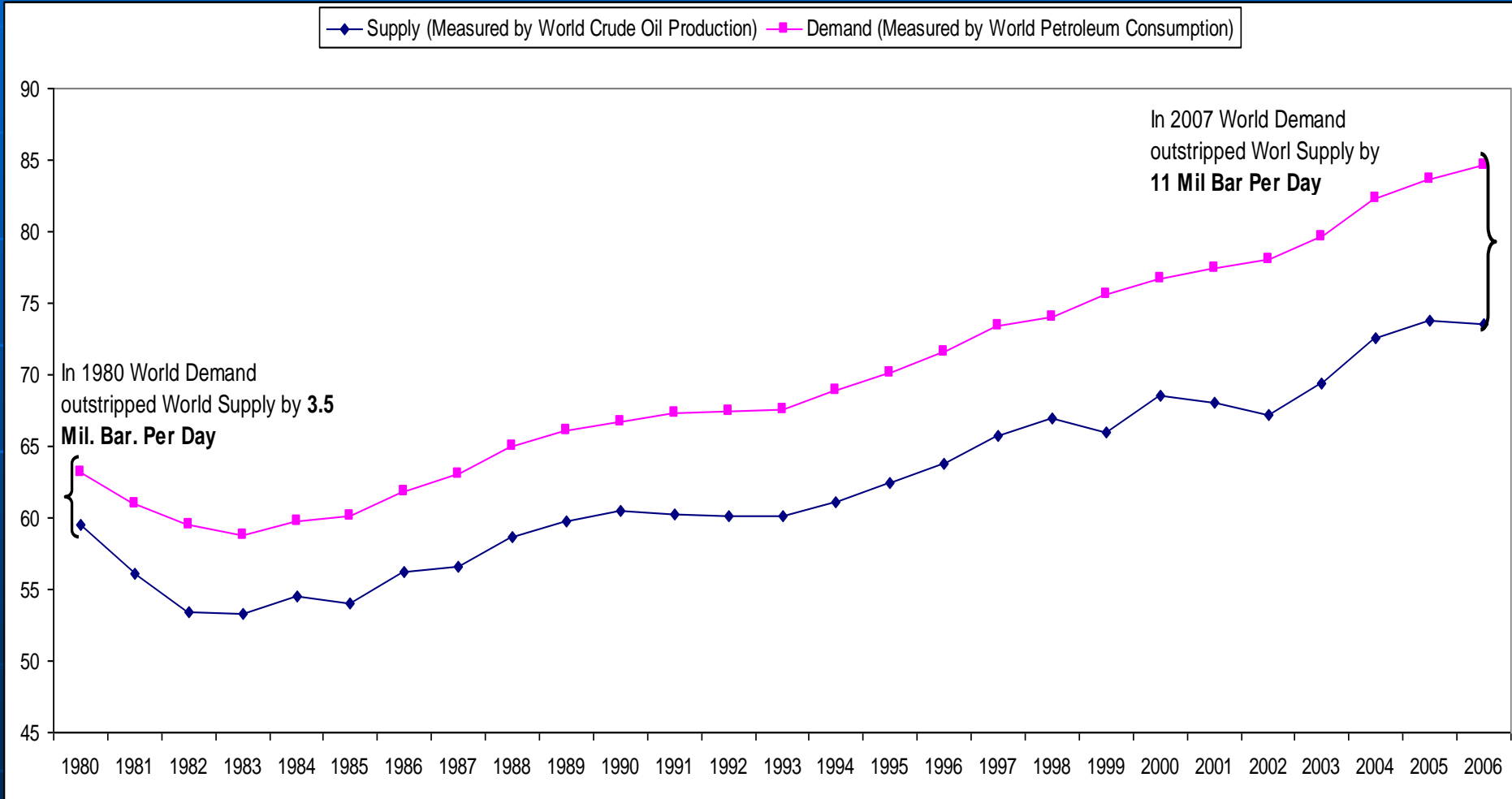
China's Oil Production and Consumption, 1980-2003



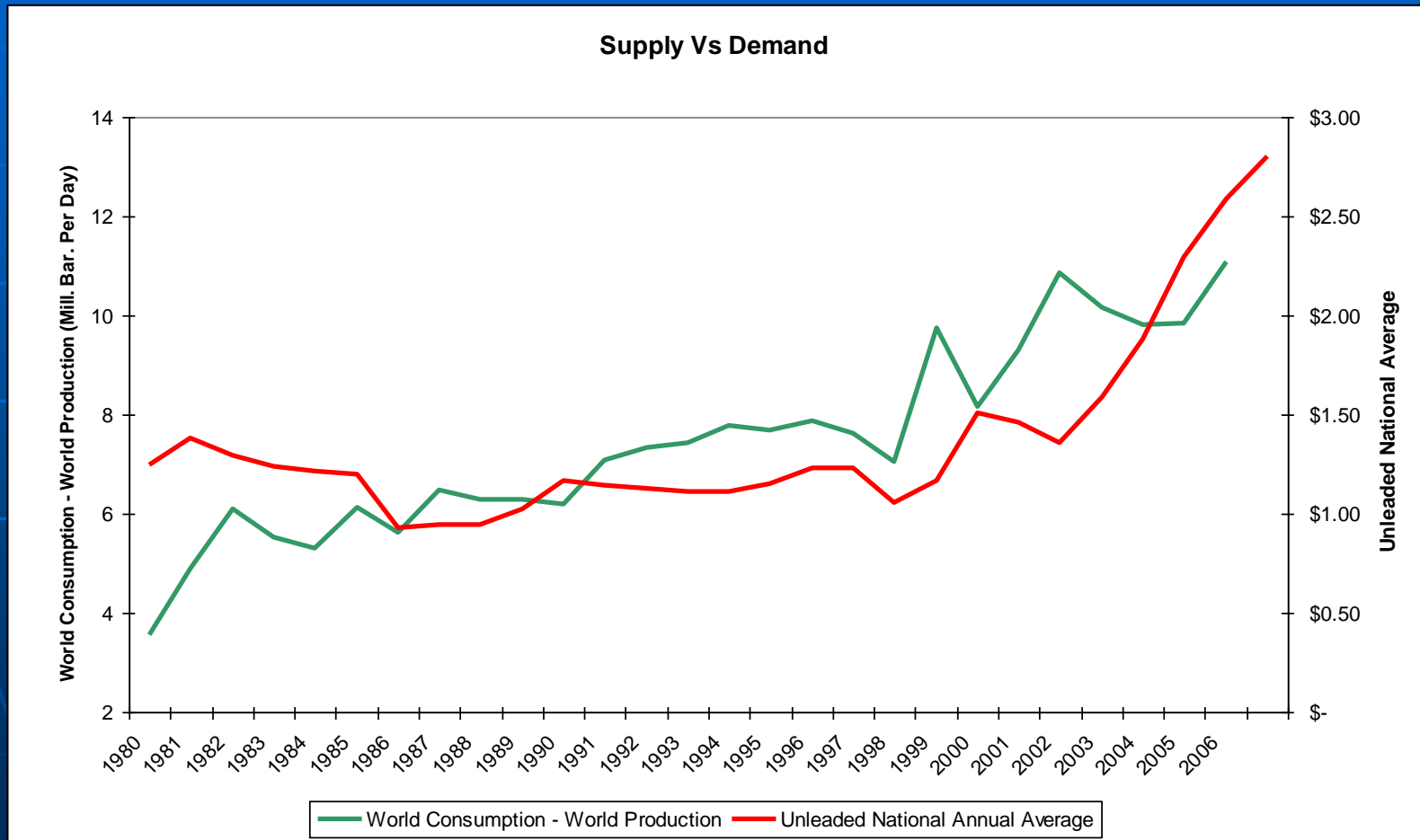
Indian Oil Production and Consumption, 1980-2003



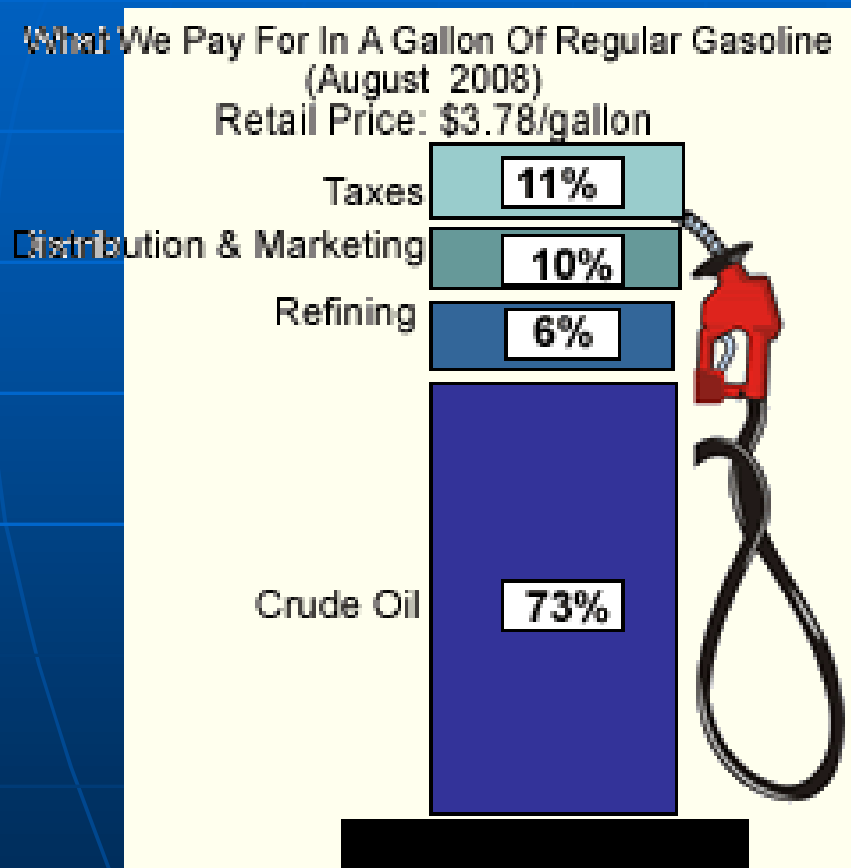
World Supply Demand Imbalance



Supply Vs Demand Sets Prices



What Goes Into A Gallon of Gas



- Taxes 11%
- Distribution and Marketing 10%
- Refining 6%
- Crude Oil 73%

Distribution and Marketing 10%

- Logistics, Retail Operational Expense, Salaries, and Profits for “Gas Station”
- Common Misperception
 - Price Origination Point
 - Profit Takers
 - Collusion

Collusion has been extensively studied by Academia, States, and Federal Government

■ Academia

- Harvard: Regional Gasoline Content Regulation and Gasoline Spikes
- University of North Carolina: Retail Gasoline Price
- Stanford University: Why California Gasoline Prices are So High? 2004

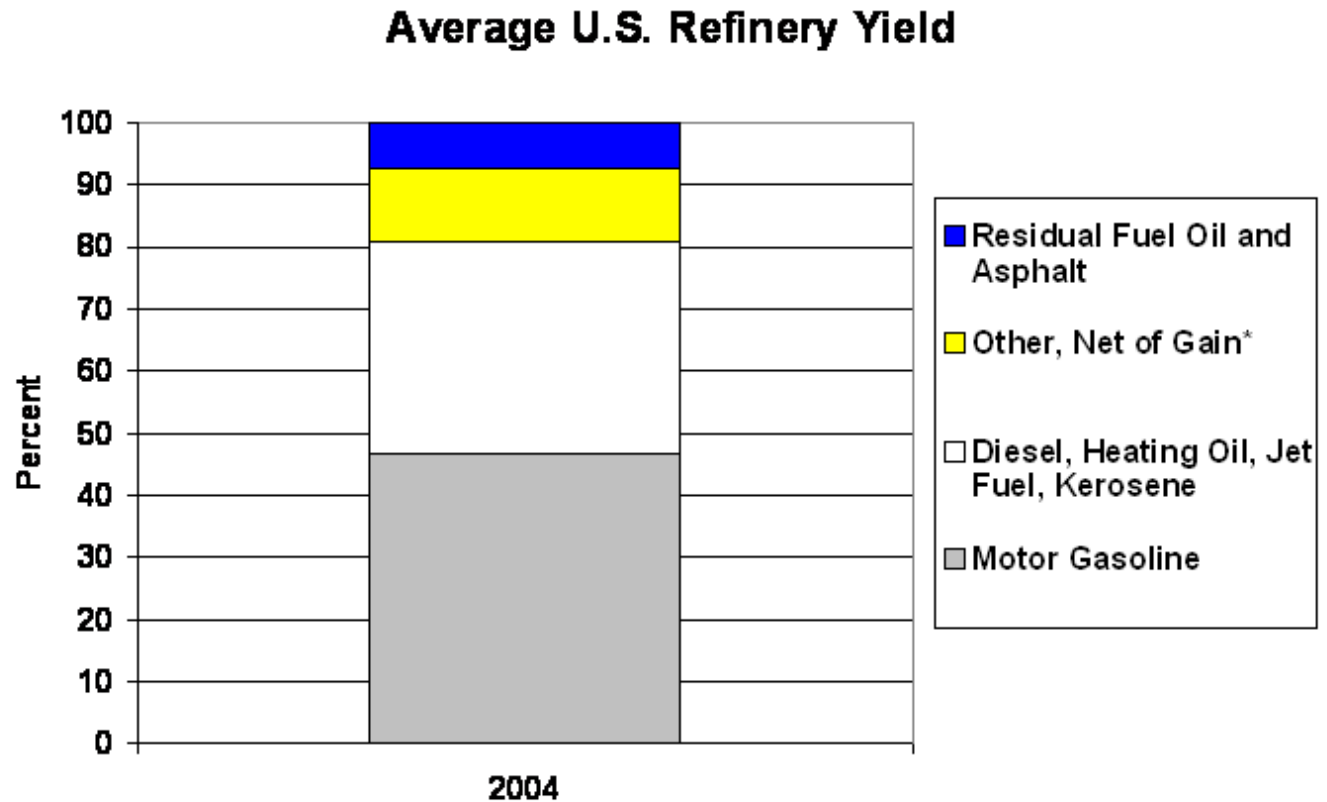
■ States

- Washington: State Gasoline Prices
- California: Price Spikes Spring of 2006 (papers produced 2006, 2005, and 2003)

■ Federal Government

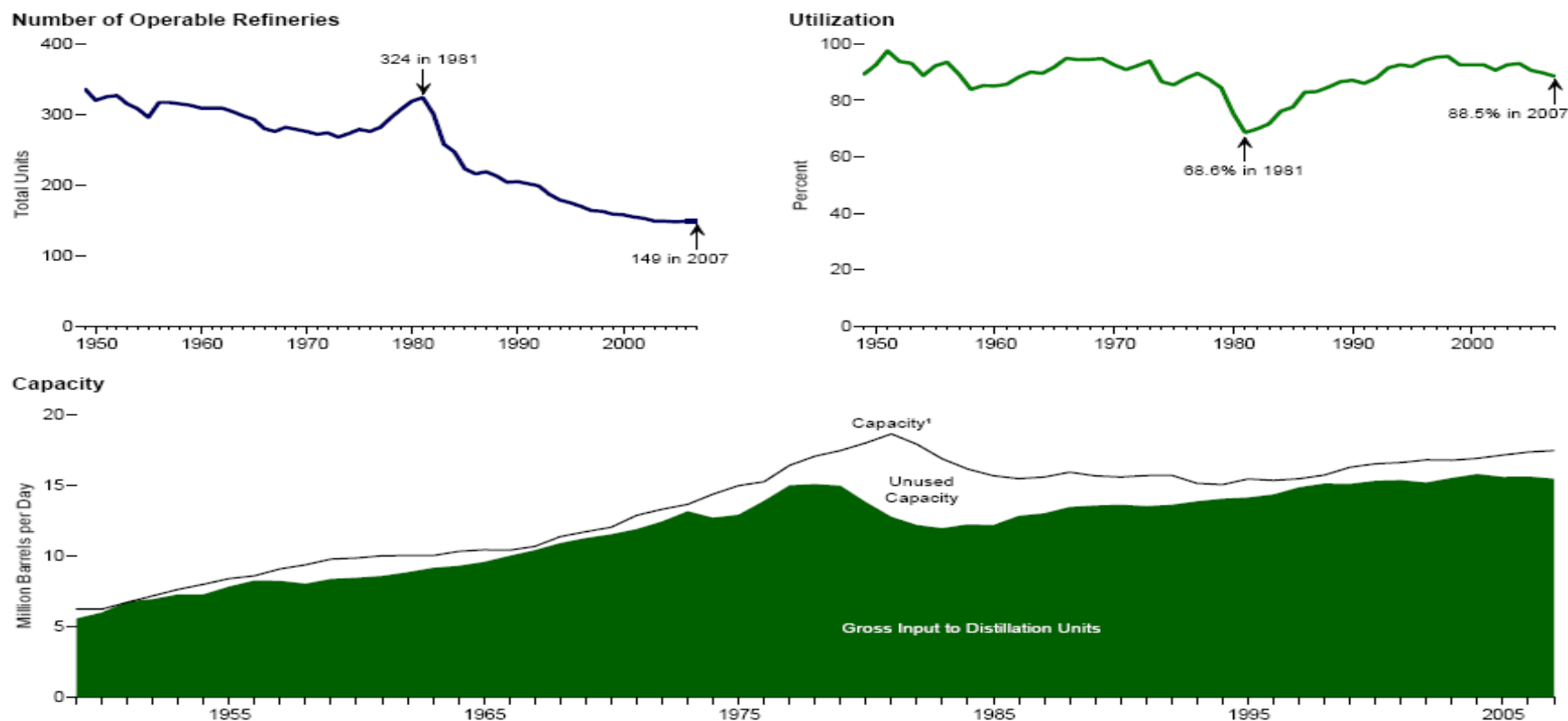
- Reports by the FTC
 - Submits report to Committees on Appropriations every 6 months
 - Interim report to Congress
 - Market Reports in 2008, 2006, 2005, and 2003
- DOE and EIA
 - Price Changes in the Gasoline Market

Refining 6%



EIA: Refinery Capacity and Utilization

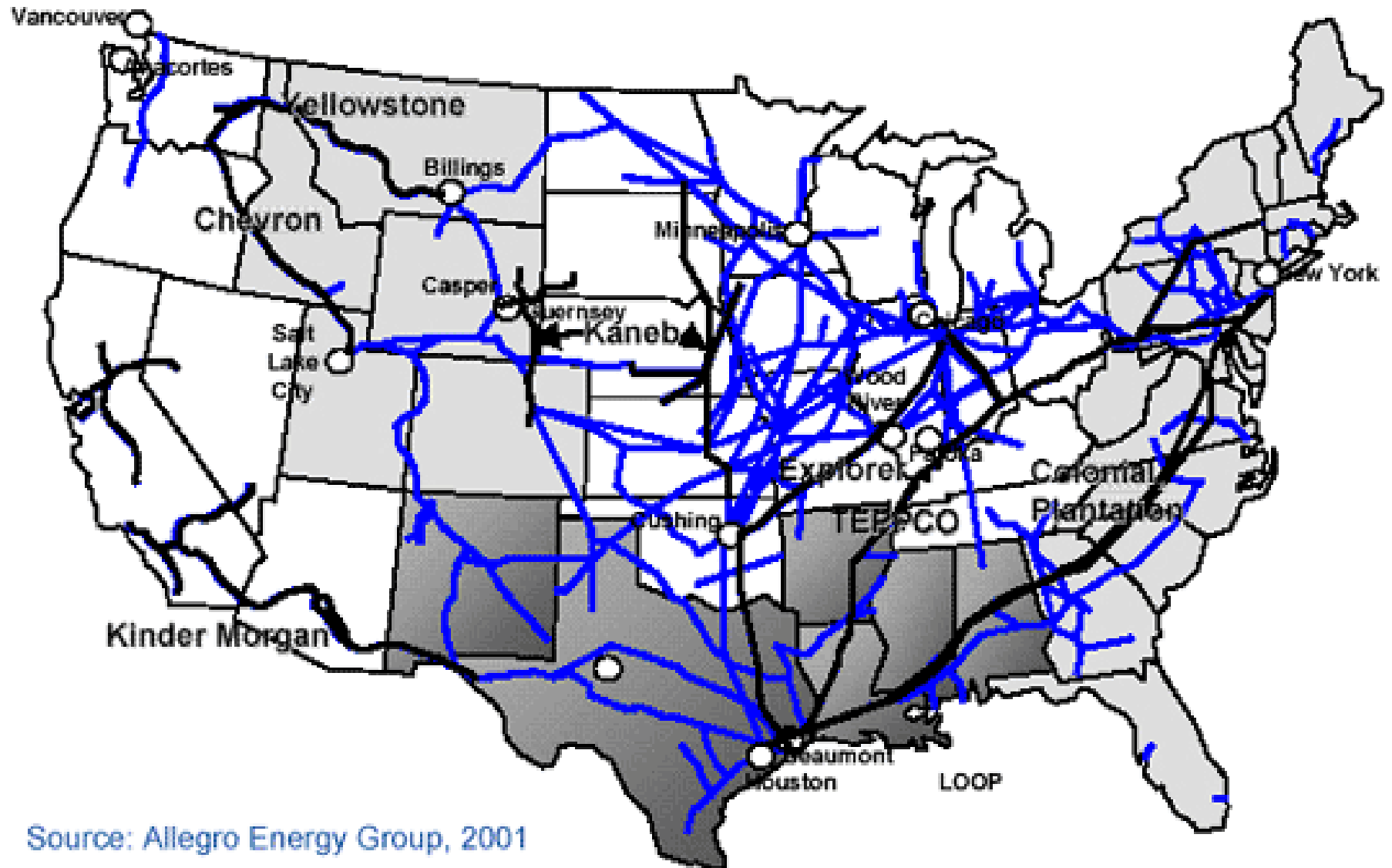
Figure 5.9 Refinery Capacity and Utilization, 1949-2007



¹ Operable refineries capacity on January 1.

Source: Table 5.9.

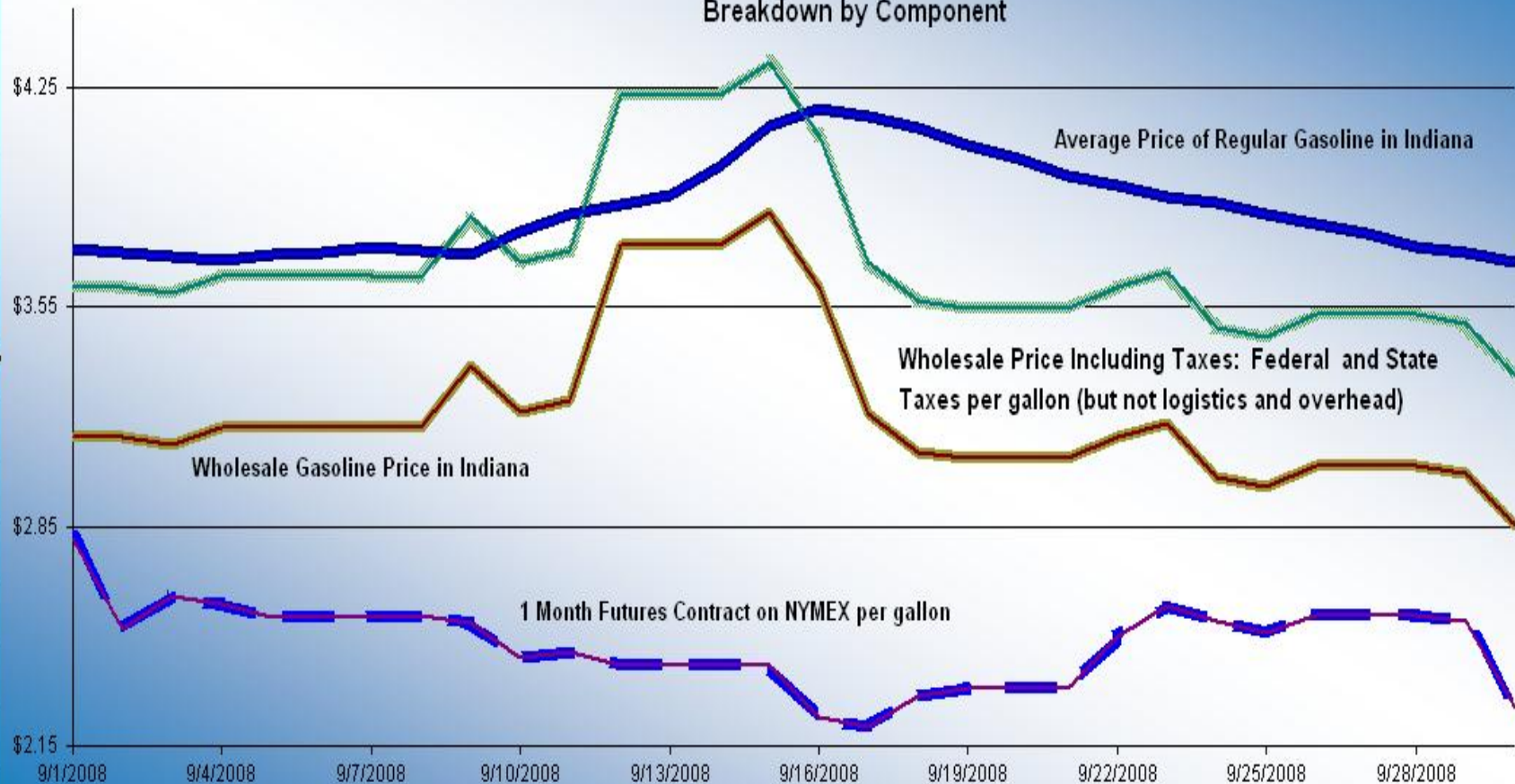
Major Refined Products Pipelines



Source: Allegro Energy Group, 2001

Refinery Disruption: Ike

Average Daily Price of Indiana Regular Grade Gasoline
Breakdown by Component



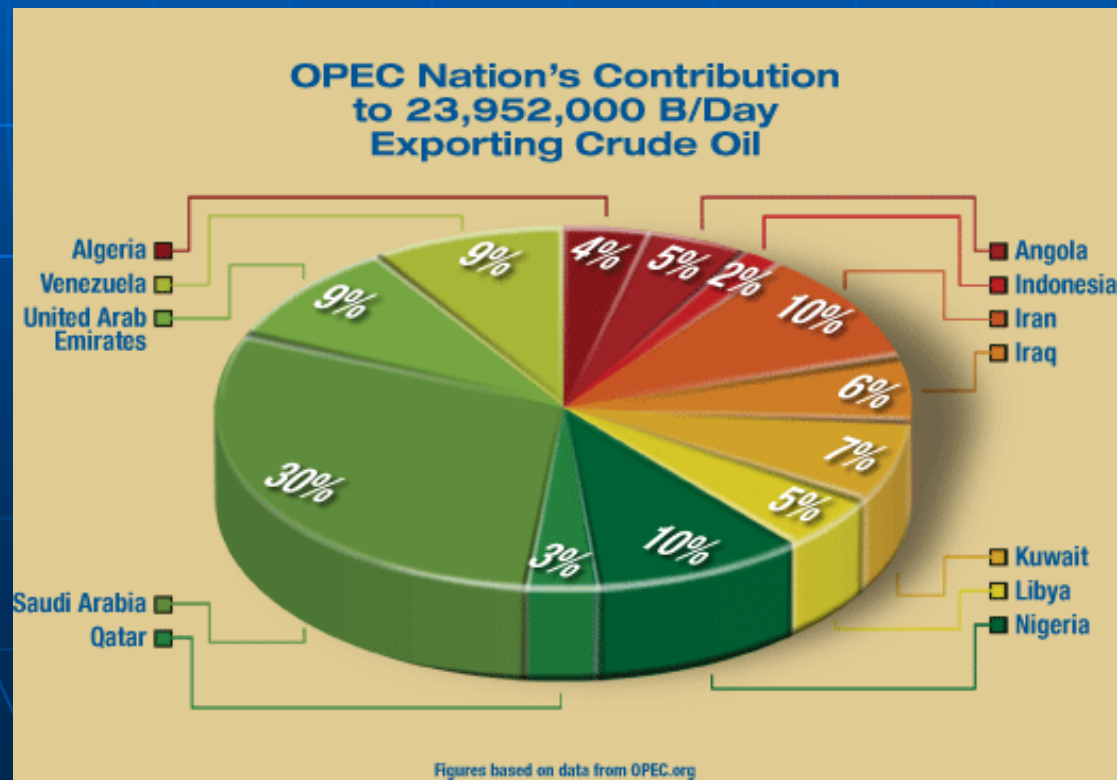
CRUDE OIL 73%

WORLD FACTORS

- Collusion
- Growth Markets
- Financial Markets
- Terrorist Premium

| | | | |
|--------------|----------------------|-----------|-------|
| Algeria | Indonesia | Iran | Iraq |
| Kuwait | Libya | Nigeria | Qatar |
| Saudi Arabia | United Arab Emirates | Venezuela | |

- Collusive Organization for the purpose of Price Fixing
- Words Mean Less and Less



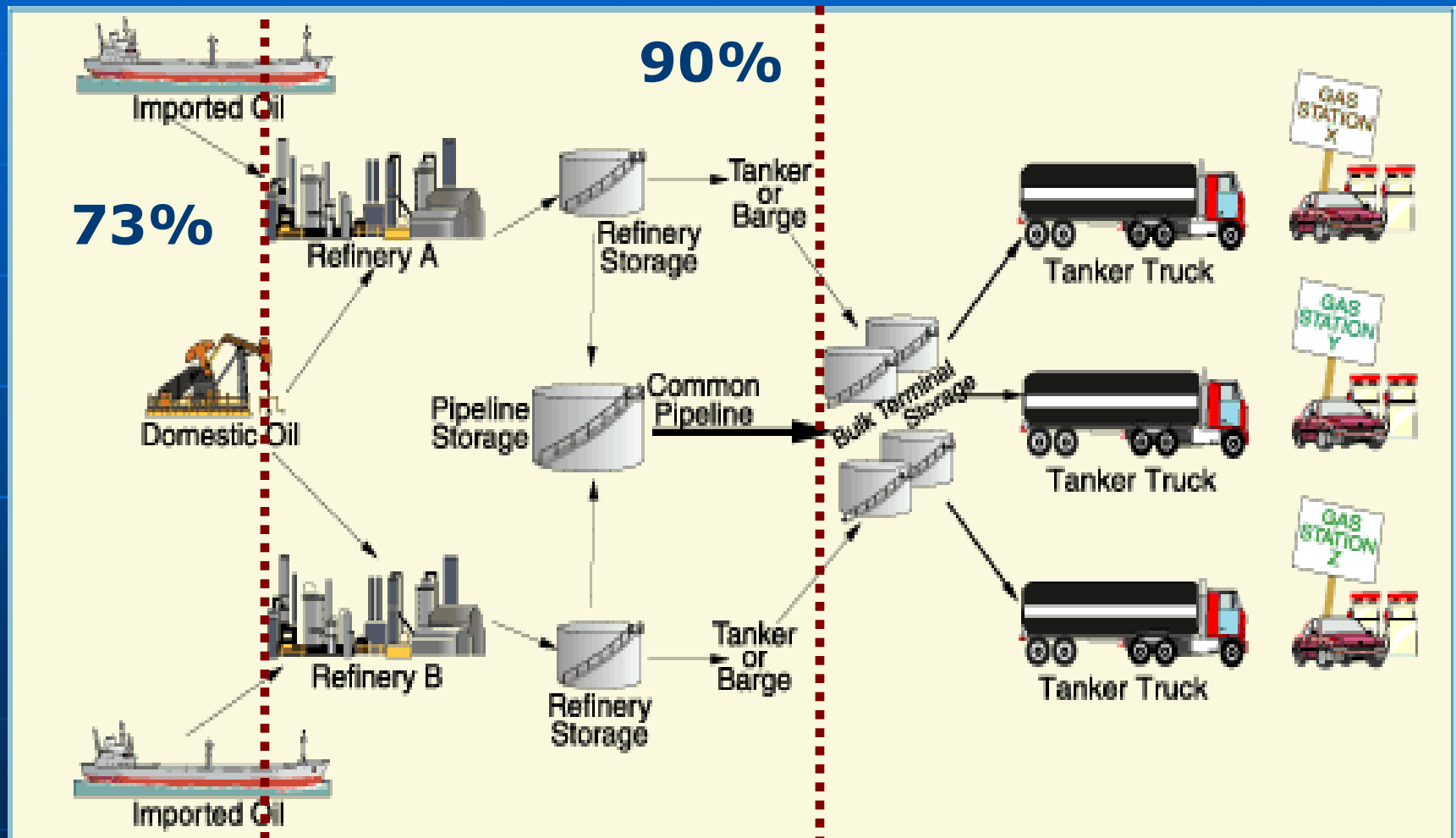
Hedging and Speculation

- 'Direct' Hedging: Refinery wants to make profit on refining not exposure to oil
- 'Indirect' Hedging: Low correlation against Traditional Financial Instruments, excellent for diversification
- Speculation: Betting in the direction of Crude Oil Prices. Is being flushed out with current market conditions.

Terror Premium

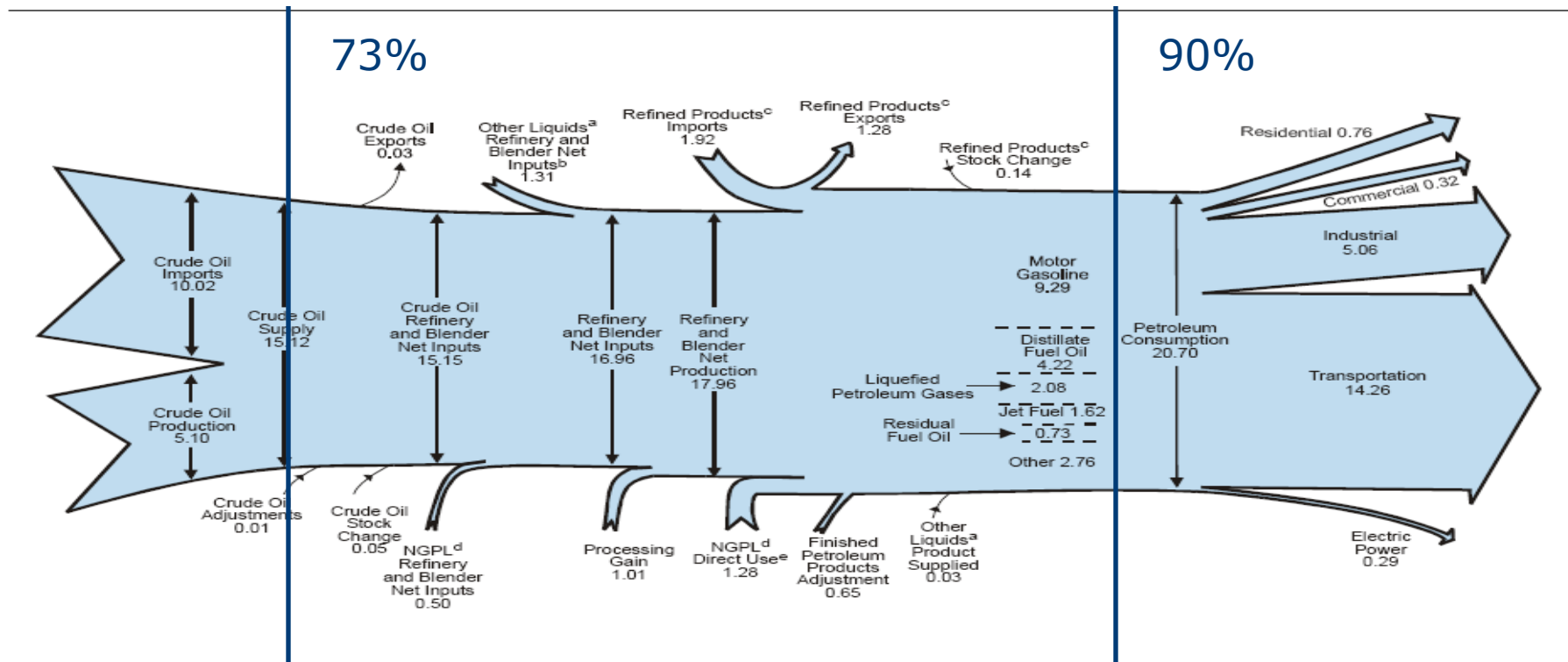
- Uncertainty is the greatest contributor to Volatility

The Process



EIA: Petroleum Flow

Diagram 2. Petroleum Flow, 2007
(Million Barrels per Day)



^a Unfinished oils, other hydrocarbons/hydrogen, and motor gasoline and aviation gasoline blending components.

^b Net imports (1.41) and adjustments (-0.05) minus stock change (0.02) and product supplied (0.03).

^c Finished petroleum products, liquefied petroleum gases, and pentanes plus.

^d Natural gas plant liquids.

^e Production minus refinery input.

Notes: • Data are preliminary. • Values are derived from source data prior to rounding for publication. • Totals may not equal sum of components due to independent rounding.

Sources: Tables 5.1, 5.3, 5.5, 5.8, 5.11, 5.13a-5.13d, 5.16, and *Petroleum Supply Monthly*, February 2008, Table 4.

Good Questions I have received over the years:

- Is the supply of gasoline (or announced supply of gasoline) artificially manipulated to keep prices high?
 - Yes, OPEC:
 - but unfortunately out of States' jurisdiction.
 - OPEC's sway is drastically diminished at current export levels

Good Questions I have received over the years:

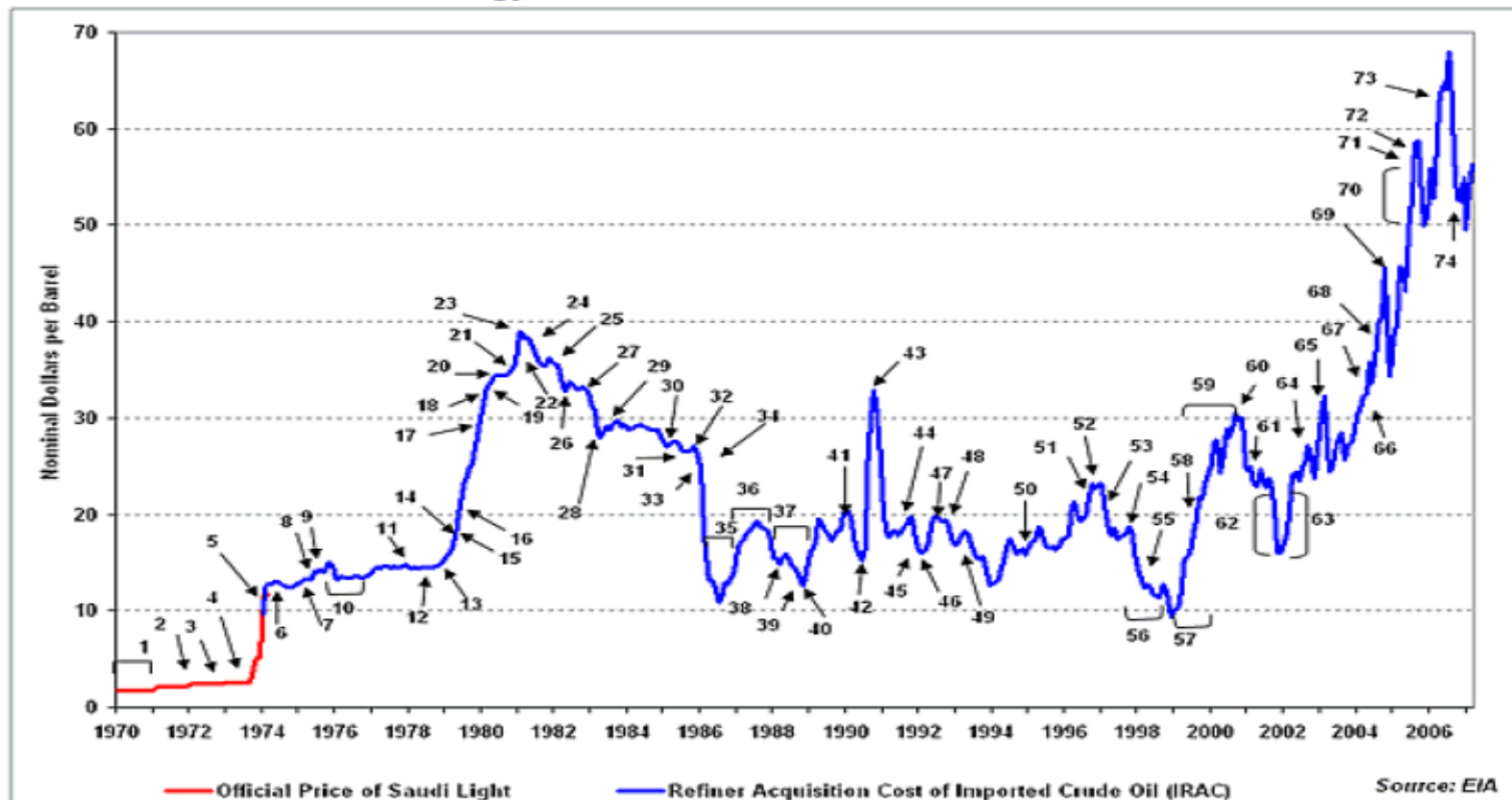
- Why does the price at the pump increase immediately upon the occurrence of an event that will not potentially affect supply until months into the future?
 - JIT Inventory Practices
 - Price taking by consumers

Good Questions I have received over the years:

- Can we be assured that if production of gasoline is increased the price of gas will come down?
 - Historic precedence should hold
 - 70 Oil Embargo
 - 20 demand explosion

Annual Oil Market Chronology: EIA

World Nominal Oil Price Chronology: 1970-2006



Good Questions I have received over the years:

- Are the States doing enough to reduce the price of Gasoline?
 - As a consumer of oil, gov. is limited
 - 2 Examples of unsuccessful legislation

Legislation To Control Variability

- New Hampshire: Price can not fluctuate more than once in 24 hours.
 - Retailers must price in any possible increases once a day
 - Indiana Margin \$.085
 - New Hampshire Margin: \$.159
 - 187% difference

Legislation to Control Pricing

- Hawaii: Retail price must be tied to rack price in LA
 - If a margin is legislated, Price Taking will ensure price is fixed at high end
 - Lifted after 8 months
 - Hawaii Department of Business, EDT estimates consumers lost \$54.9 million in 1st five months.

State Mandated Fuel Requirements



Lets Look at Indiana



30 Day Moving Average Prices

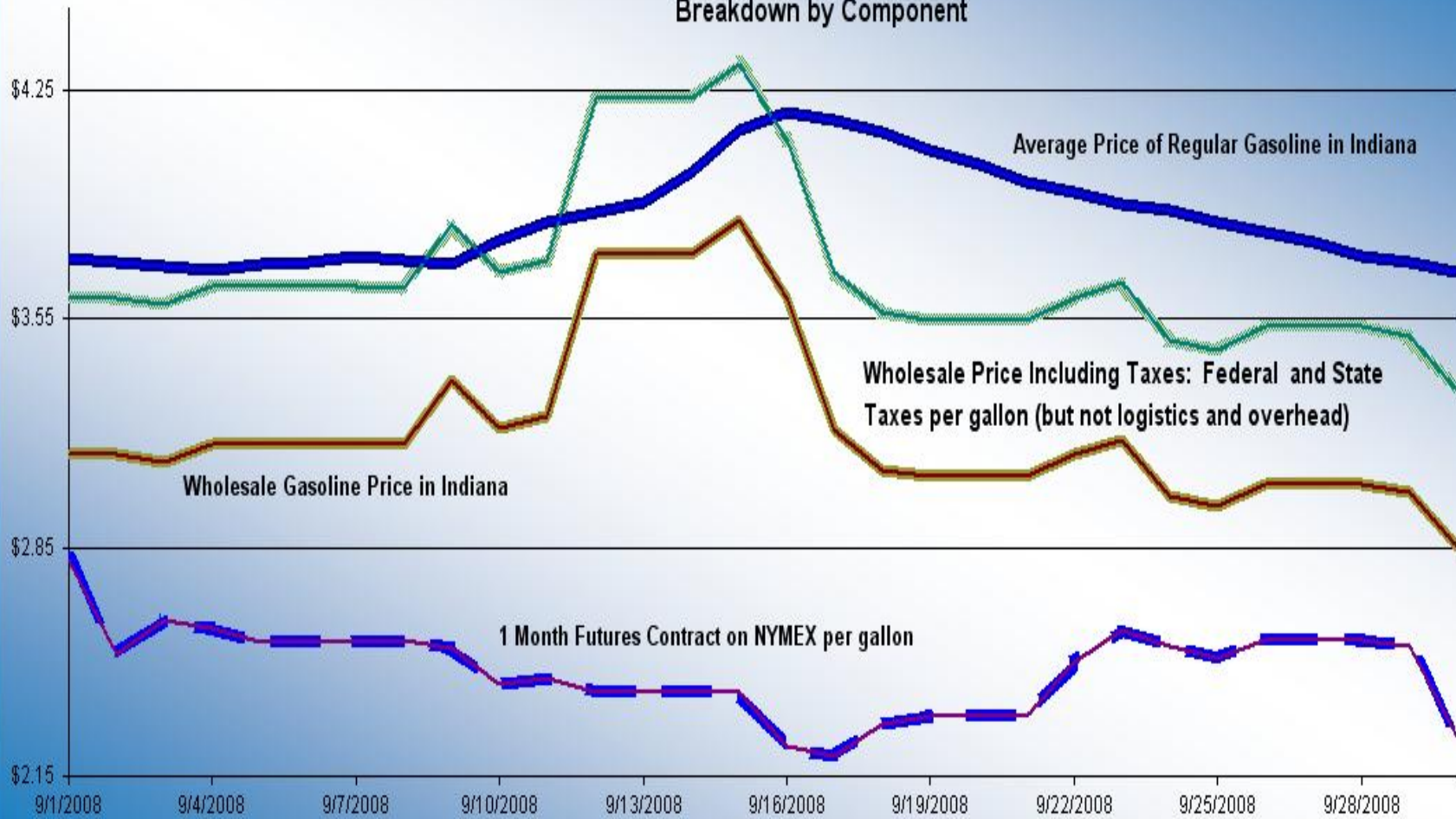
Indiana Running Average Price for Regular Gasoline per day 2008

| | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday | City Ave. |
|---------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Bloomington | \$3.4260 | \$3.3906 | \$3.4040 | \$3.4170 | \$3.4264 | \$3.4306 | \$3.4279 | \$3.4175 |
| Evansville | \$3.4395 | \$3.4021 | \$3.4269 | \$3.4445 | \$3.4498 | \$3.4507 | \$3.4453 | \$3.4370 |
| Fort Wayne | \$3.4253 | \$3.3827 | \$3.4070 | \$3.4304 | \$3.4385 | \$3.4397 | \$3.4339 | \$3.4225 |
| Gary | \$3.4664 | \$3.4275 | \$3.4484 | \$3.4600 | \$3.4682 | \$3.4717 | \$3.4689 | \$3.4587 |
| Indianapolis | \$3.4542 | \$3.4120 | \$3.4312 | \$3.4493 | \$3.4564 | \$3.4609 | \$3.4570 | \$3.4459 |
| South Bend | \$3.4218 | \$3.3757 | \$3.3834 | \$3.4017 | \$3.4198 | \$3.4185 | \$3.4193 | \$3.4057 |
| Terre Haute | \$3.4589 | \$3.4258 | \$3.4448 | \$3.4583 | \$3.4704 | \$3.4697 | \$3.4659 | \$3.4563 |
| STATE AVE. | \$3.4417 | \$3.4023 | \$3.4208 | \$3.4373 | \$3.4471 | \$3.4488 | \$3.4455 | \$3.4348 |
| (Unweighted) | | | | | | | | |

How we Monitor

- Collect Prices from Public
- Model Pricing behavior across Jurisdictions
 - Crude Market Futures
 - Rack Wholesale Prices
 - Indiana Market Prices
- Daily Comparisons Made:
Information shared with public

Average Daily Price of Indiana Regular Grade Gasoline Breakdown by Component



Indiana Margins

| Bracket C | | Rank |
|------------------------------------|------------------------------------|------|
| | 2.5 Bloomington-Normal, Il | 1 |
| | 6.7 Savannah, Ga | 16 |
| 2.5 Bloomington-Normal, Il | | |
| 6.3 Memphis, Tn-Ar-Ms (AR Only) | | |
| 2.5 Bloomington-Normal, Il | 8.5 Tyler, Tx | 8 |
| 4.9 Augusta-Aiken, Ga-Sc (GA Only) | 6.3 Memphis, Tn-Ar-Ms (AR Only) | 9 |
| | 6.2 Billings, Mt | 4 |
| | 4.9 Augusta-Aiken, Ga-Sc (GA Only) | 13 |
| | 4.9 Augusta-Aiken, Ga-Sc (GA Only) | |
| | 7.6 Columbia, Mo | |
| 2.5 Bloomington-Normal, Il | 7.6 Columbia, Mo | 5 |
| 2.6 Lafayette, In | 7.9 Jonesboro, AR | 12 |
| | 7.2 Lubbock, Tx | 3 |
| | 7.2 Bloomington, In | 14 |
| | | |
| | 4.9 Colorado Springs, Co | 6 |
| | 2.6 Lafayette, In | 11 |
| | | |
| | 5.4 Waterloo-Cedar Falls, Ia | 2 |
| | 7.6 Saginaw-Bay City-Midland, Mi | 15 |
| | | |
| | 7.0 Fayetteville, Nc | 7 |
| | 5.0 Chattanooga, Tn-Ga (GA Only) | 10 |
| | | |
| | 5.4 Waterloo-Cedar Falls, Ia | |
| | 5.0 Chattanooga, Tn-Ga (GA Only) | |

Indiana Margins

| Rank | Bracket B | |
|------|---------------------------------|-----|
| 1 | Phoenix-Mesa, Az | 5.9 |
| 16 | Elkhart-Goshen, In | 5.8 |
| | Elkhart-Goshen, In | 5.8 |
| | Champaign-Urbana, Il | 0.9 |
| 8 | Champaign-Urbana, Il | 0.9 |
| 9 | Wilmington, Nc | 7.6 |
| | Champaign-Urbana, Il | 0.9 |
| | Indianapolis, In | 3.1 |
| 4 | Orange County, Ca | 6.1 |
| 13 | Indianapolis, In | 3.1 |
| | Indianapolis, In | 3.1 |
| | Kansas City, Mo-Ks (MO Only) | 7.0 |
| 5 | Kansas City, Mo-Ks (MO Only) | 7.0 |
| 12 | Denver, Co | 7.4 |
| | Champaign-Urbana, Il | 0.9 |
| | Evansville-Henderson, In | 0.0 |
| 3 | Springfield, Il | 5.0 |
| 14 | Kokomo, In | 6.6 |
| | Springfield, Il | 5.0 |
| | Evansville-Henderson, In-Ky (IN | 0.0 |
| 6 | Evansville-Henderson, In-Ky (IN | 0.0 |
| 11 | Louisville, Ky-In (IN Only) | 5.4 |
| | Evansville-Henderson(IN Only) | 0.0 |
| | Wichita, Ks | 4.7 |
| 2 | Great Falls, Mt | 7.1 |
| 15 | Sioux City, Ia-Ne (IA Only) | 7.5 |
| | Great Falls, Mt | 7.1 |
| | Wichita, Ks | 4.7 |
| 7 | Lawrence, Ks | 5.2 |
| 10 | Wichita, Ks | 4.7 |

OPIs MARCH MADNESS

- Indiana has 9 in the 64 chosen markets
- Has 4 in the Sweet 16
- Balance poor margin with need to ensure competition

Jurisdiction

- General Consumer Statute & Anti-Trust Statute
 - Retail Level
 - Rack to Retail Level: Margins
- Indiana Price Gouging Statute: IC 4-6-9.1
 - State of Emergency
 - Price grossly exceeds prior 7 day average
 - Price increase not attributable to market forces

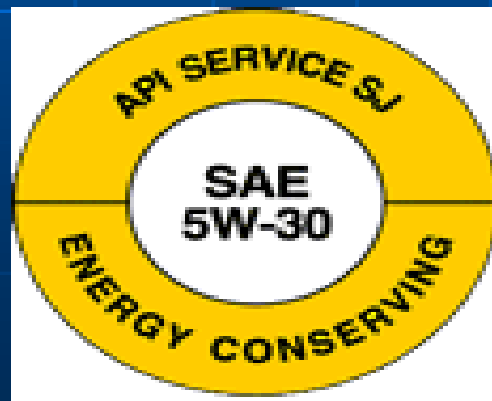
Solutions

- Increase Supply (10 year lead time)
- Decrease Demand (Consumer, aggregate, world)
- Consumer Expenditures
 - If you ID a store selling cheaper, buy from the store
 - Fuel Efficient Vehicles (5 year lead time)
 - Smart Driving Tips

■ Save Gas ! Cont.

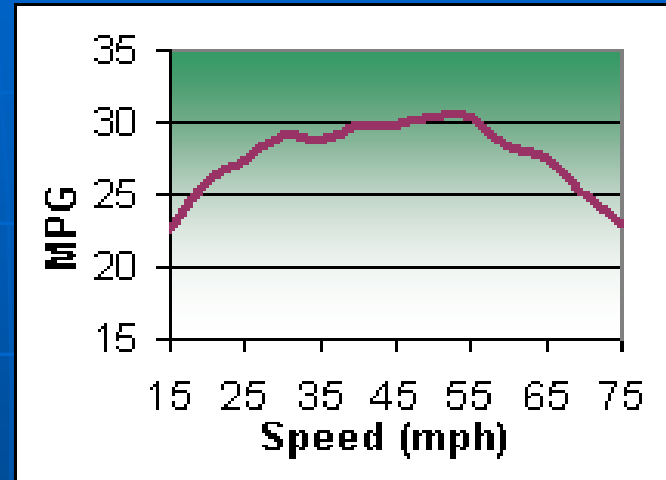
- Keep Engine Tuned (\$.06 - \$.60)
- Filters (\$.15)
- Tires Properly Inflated (\$.05)
- Recommended Oil (\$.03)

| RECOMMENDED | | | |
|---|------------------------------|------------|------------|
| | FRONT | REAR | SPARE TIRE |
| TIRE SIZE | P145/80R12 | T105/80D13 | |
| COLD TIRE PRESSURE | 32 PSI | 60 PSI | |
| AT MAX LOAD | 220 KPA | 420 KPA | |
| VEHICLE CAPACITY | | | |
| MAX. LOAD (LBS) | 688 (OCCUPANTS PLUS LUGGAGE) | | |
| OCCUPANTS | FRONT 2 | REAR 2 | |
| SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION | | | |



How to Save Money on Gas

- **SAVE GAS!!**
 - Speed (\$.10 - \$.34)
 - Don't Idle
 - Cruise Control
 - Overdrive Gears



Possible Savings

- At 20 Mpg
- Driving 15,000 MPY
- Saving \$.26 per gallon
- Will save \$195.00 for Year

Information Sources

■ Indiana Attorney General's Office

http://www.indianaconsumer.com/consumer_guide/gasoline_resources.asp

Access Via Indianaconsumer.com

Indiana Specific Price Information

Ability to Issue Complaint

Annual Supply and Demand Information

Designed to be Constituent friendly resource

Energy Information Administration: EIA

- Official Energy Statistics from Feds

<http://www.eia.doe.gov/>

Petroleum

Natural gas

Electricity

Coal

Renewable & Alternative

Nuclear

Resource for macroeconomic variables and analysis

American Petroleum Institute

■ Industry Organization

<http://api-ep.api.org/>

Advocacy

Research and Stats

Standards

Certification

Education

Great comparative resource for pending legislation and Industry activities.

OPIS

(Oil Price Information Service)

- Independent Data Repository

<http://www.opisnet.com/>

Raw Price Data (retail and wholesale)

Scholarly Articles

Industry Statistics (primarily retail)

“OPIS is the world’s most comprehensive source for petroleum pricing and new information.”